Amendments to the claims (this listing replaces all prior versions):

1. (Previously presented) A machine-based method comprising:

receiving data representing current prices of options on an asset, the options being associated with different strike prices of the asset at a future time,

by machine, performing computations to derive from the data an estimate of probabilities corresponding to a price or prices of the asset at a future time,

the computations including

a smoothing operation performed on the option price data as a function of the corresponding strike price, the operation performed on implied values of a volatility parameter at varying strike prices in the Black-Scholes option pricing formula,

a first derivative operation on a result of the smoothing to obtain a first probability distribution, and

adding a risk premium to the first probability distribution to obtain a second probability distribution, and

making information about the second probability distribution available within a time frame that is before the future time.

2. (Previously presented) The method of claim 1 in which the data represent a finite number of prices of options at spaced-apart strike prices of the asset, and in which

the first derivative operation to obtain a first probability distribution comprises calculating a set of first differences to form an estimate of the cumulative probability distribution of the price of the asset at a future time.

3. (Previously presented) The method of claim 2 in which

obtaining a second probability distribution also includes

adding a risk premium to the prices of options, and

calculating a set of second differences from the set of first differences to form an estimate of the probability density function of the price of the asset at a future time.

4-28. (cancelled)